

2020 Vision/CNS Implications

- Collaborative DECSNS—Near/Real-Time
- RNAV— Ubiquitous
- Improved surveillance (Quant/Qual)
 - ADS-(Includes **NAS** status)
- Self sep is growing
- Comm is distributed/ integrated/ voice/ DL/ Text/ Icons/ Graphical
- Point—Point is driver
 - Non prime airspace
- Next NEXCOM identified & begin adopting
- New certification paradigm

Transition/Gap Issues

- Economic incentives to adopt/equip
- Spectral efficiency
 - FAA Restructure/ Re-think
 - Band with. . .not frequency
- FAA cannot support—(UPT) (in high quantities)
- Self Sep safety /Procedures/Politics
- Integrated traffic (TIS-B/ ADS-B/ Radar/ etc.)
- CNS (W?) –Re-enforcing Surv=TFC/WX/Airspace
- WX forecasting/ now casting/ sensing
- Affordability and upward compatibility
 - Plug and Play-- **Plan** for Retrofit

More Transition/Gap Issues

- Quantify current comm choices (V2/3/4) to plan for next (5/6/7)
- Certification/ OPS concepts is **included** in basic R&D
- Ground comm process/infrastructure must be upgraded to support growing collaboration/divorcing from geography

Steering/Review/Guidance Plan

- International
 - Leadership: FAA/ NASA/ Eurocontrol/
 - REDAC/ **CNS** Sub comm.
 - Success: Focus funding to unleash the potential of 2020 con ops /Real data in front of decision makers; Optimize/harmonize R&D CNS efforts
 - Method:
 - Incentives: Incorporated into success criteria